This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-36 (Canceled)

37. (Currently Amended) An image sensing apparatus comprising:

an image sensor which separately reads out image signals from a plurality of photoreceptive pixels via a plurality of output channels;

~~a memory for temporarily storing the image signals output from the output channels;~~

a reference level acquisition unit adapted to acquire a first reference level by selecting a maximum of ~~based on~~ the image signals read ~~from said memory~~ via said plurality of output channels when said image sensor reads a white member, and acquire a second reference level by selecting a minimum of ~~based on~~ the image signals ~~read from said memory~~ via said plurality of output channels when said image sensor reads a reference density member having a predetermined density of half tone;

~~an adjustment setting unit for setting adjustment data for each channel based on the acquired~~ a reference value setting means for setting reference values by fitting said first and second reference levels; and

a plurality of adjustment units, respectively corresponding to said plurality of output channels, each adapted to adjust levels of the image signals output ~~from~~ via corresponding one of said plurality of output channels to said corresponding reference values set by said reference value setting means ~~according to the set adjustment data for each channel so as to substantially correspond with said first reference level when said image sensor reads said white member,~~

~~adjust levels of the image output from said output channels according to the set adjustment data for each channel so as to substantially correspond with said second reference level when said image sensor reads said reference density member, and adjust levels of the image signals output from said output channels according to the set adjustment data for each channel so as to substantially correspond with a level obtained by interpolating between said first and second reference levels when said image sensor reads an image having a density other than the density of said white member and said reference density member, the plurality of adjustment units operating to match the linearity of the plurality of channels to a common linearity,~~

~~wherein said first reference level is a maximum of signal levels read out via the plurality of output channels when said white member is scanned, and said second reference level is a minimum of signal levels read out via the plurality of output channels when said reference density member is scanned~~.

38. (Original) The image sensing apparatus according to claim 37, wherein said reference density member is provided within the image sensing apparatus.

39. (Previously Presented) The image sensing apparatus according to claim 37 further comprising a platen for placing an original to be read on it,

wherein said image sensor reads said reference density member in a case where said reference density member is placed on said platen.

40-48. (Canceled)

49. (Currently Amended) The image sensing apparatus according to claim 37, wherein ~~the levels between~~ said first and second reference levels are ~~interpolated~~ fit to by a straight line.

50. (Currently Amended) The image sensing apparatus according to claim 37, wherein ~~the levels between~~ said first and second reference levels are ~~interpolated by~~ fit to a curve.

51. (Original) The image sensing apparatus according to claim 37, wherein the interpolation is performed by operation.

52. (Currently Amended) The image sensing apparatus according to claim 37, wherein each of said plurality of adjustment ~~data is in a form of a~~ units includes a look up table for converting levels of the image signals output via corresponding one of said plurality of output channels to said reference values.

53. (Previously Presented) The image sensing apparatus according to claim 37, wherein said plurality of output channels comprise a first output channel which outputs image signals of even-numbered photoreceptive pixels, and a second output channel which outputs image signals of even-numbered photoreceptive pixels.

54. (Original) The image sensing apparatus according to claim 37, wherein said image sensor is a linear image sensor.

55 (Original) The image sensing apparatus according to claim 54, wherein a plurality of said linear image sensors respectively corresponding to a plurality of colors are provided to form a color image sensor.

56. (Original) The image sensing apparatus according to claim 37, wherein said image sensor is an area image sensor.

57. (Currently Amended) The image sensing apparatus according to claim 37, wherein each of said plurality of adjustment units includes an amplifier for amplifying the image signal output ~~from the~~ via corresponding one of said plurality of output ~~channel~~ channels to said reference values.

58. (Previously Presented) The image sensing apparatus according to claim 37, further comprising A/D converters each adapted to convert the image signal output from each output channel from an analog signal to a digital signal.

59. (Original) The image sensing apparatus according to claim 39, wherein the image sensing apparatus is connected to a printer and said reference density member is printed by said printer.

60. (Original) The image sensing apparatus according to claim 37, wherein said reference density member has at least a portion of uniform density.

61. (Original) The image sensing apparatus according to claim 59, wherein the image sensing apparatus is integrally configured with said printer.

62-89 (Canceled)